



# 2006 Regional Children's Environmental Health Summit

*“Children’s Health and Their Environments:  
Making The Connection”*

**September 19–21, 2006**

**Vail, Colorado**

Vail Cascade Resort and Spa

**Sponsored by:**

US Environmental Protection Agency, Region 8

Rocky Mountain Region Pediatric Environmental Health Specialty Unit

Colorado Department of Public Health and Environment

Colorado Public Health Association

Colorado Environmental Health Association

## Background

Children need clean air to breathe, clean water to drink, safe food to eat, and a healthy environment to learn, grow, and thrive. Yet every day, children are exposed to environmental risks that may stand in the way of these basic necessities. They may be more vulnerable to some environmental risks than adults for several reasons:

- Children's nervous, immune, digestive, and other systems are still developing and their ability to metabolize or inactivate toxicants may be different than adults;
- Children eat more food, drink more fluids, and breathe more air in proportion to their body weight than adults; and,
- Children's behavior—such as crawling and placing objects in their mouths—may result in greater exposure to environmental contaminants.

Many of the health problems that result from exposure to harmful environmental conditions can be prevented, managed, and treated. Risks from environmental exposure at home, school, and at play can be reduced if care is taken to assure a healthy environment. Governments, non-government organizations, private industry, educational institutions, and individuals can make a difference in protecting children from environmental harm. Through policy-making, research, and education we can work together to protect our children and our future.

Communities, states, and the federal government can create policies that protect children from environmental risks and provide proper medical care to those children exposed to such risks.

Legislation, regulations, and standards in areas such as housing, transportation, education, agriculture, health, and the environment, should explicitly consider children's environmental exposures and health effects.

Scientific evidence shows that children are different from adults in terms of their exposure and susceptibility to pollutants. This evidence may explain the relationship between environmental risks and some childhood illnesses. Still, gaps exist in our understanding of how, and to what extent, environmental contaminants cause or exacerbate childhood diseases and developmental disorders. Children's environmental health research should be a priority.

The public turns to health care professionals for environmental health information. The health care community must be trained in environmental health, and equipped to share information about environmental risks and children's health.

Youth involvement in recycling programs created a cultural change in the way we manage our trash. Programs aimed at children and youth will create a new generation of experts on environmental health—a generation that will be prepared to answer the new questions that our ever-changing world poses.

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## Summit Goals:

1. *Increase the ability of health, environmental, and education professionals to identify, prevent, and reduce environmental health threats to children;*
2. *Share information, resources, "best practices," and emerging science regarding the protection of children's health from environmental hazards;*
3. *Encourage coordination and information sharing across government agencies, health organizations, health care providers, educators, and the general public in addressing children's environmental health issues;*
4. *Identify actions that can be implemented throughout the Region to protect children from environmental health threats; and*
5. *Provide public health professionals with an opportunity to identify/implement effective children's health strategies in advance of Children's Health Month in October.*

### Continuing Education Credits:

Continuing education credits have been approved for the following categories:

- For CME, a maximum of 14.5 category 1 credits will be awarded.
- For CNE, 14.5 nursing contact hours will be awarded.
- For CEU, 1.25 units will be awarded.
- For CHES, 13.5 continuing education contact hours will be awarded.

## Our Keynote Speakers:



**Edward B. Clark, MD**, Wilma T. Gibson Presidential Professor, Chairman of Pediatrics, University of Utah, and, Medical Director, Primary Children Medical Center

Dr. Clark is currently the Wilma T. Gibson Presidential Professor and Chair of the Department of Pediatrics of the University of Utah and Medical Director of Primary Children's Medical

Center. He also holds adjunct professorships in the Departments of Obstetrics and Gynecology and Bioengineering.

Born and raised in New York City, Dr. Clark received his bachelor's degree with Honors in Biology from Union College in Schenectady, New York, and medical degree magna cum laude from Albany Medical College. He trained in Internal Medicine at Mary Hitchcock Memorial Hospital Dartmouth Medical School, Hanover, New Hampshire and in Pediatrics and Pediatric Cardiology at the Johns Hopkins Medical Institutions in Baltimore, Maryland.

Dr. Clark had faculty appointments at the University of Nebraska, the University of Iowa, the Johns Hopkins University and was Professor and Chief of Pediatric Cardiology and Associate Chair at the University of Rochester until July of 1996. At that time, he assumed his current position in Utah.

Dr. Clark has outstanding achievements in the fields of developmental biology of the cardiovascular system, human genetics of congenital cardiovascular malformations, and the care of children with chronic illness. In addition, he has had leadership positions in numerous national and international organizations. He is a consultant to the National Institutes of Health and principal investigator for the Utah Vanguard Site of the National Children's Study, a 25-year longitudinal cohort study of genetics and environment in children's health and disease. Dr. Clark has developed an integrated coordinated program for clinical care, research, and advocacy for children with chronic illness and the prevention of disease. His current research areas include human fetal cardiovascular homeostasis, structure function correlations of the developing cardiovascular system and genotype-phenotype correlation. He is currently serving as Chair of the Pediatrics Guidance Council for Intermountain Health Care. In addition to numerous professional organizations, Dr. Clark is a member of the prestigious Society of Scholars of the Johns Hopkins University. He was also honored as the 2005 Utah Children's Advocate of the Year.

Dr. Clark, his wife Carleen, and Dr. Catherine Neill, are authors of *The Heart of a Child*, a best-selling family reference book for parents of children with congenital heart defects.

**Georges C. Benjamin, MD**, FACP, Executive Director, American Public Health Association



Dr. Benjamin, is well known in the world of public health as a leader, practitioner and administrator. Benjamin has been the executive director of the American Public Health Association (APHA), the nation's oldest and largest organization of public health professionals, since December 2002. He came to that post from his position as

secretary of the Maryland Department of Health and Mental Hygiene, where he played a key role developing Maryland's bioterrorism plan. Benjamin became secretary of the Maryland health department in April 1999, following four years as its deputy secretary for public health services.

Benjamin, of Gaithersburg, Maryland, is a graduate of the Illinois Institute of Technology and the University of Illinois, College of Medicine. He is board-certified in internal medicine and is a fellow of the American College of Physicians.

An established administrator, author and orator, Benjamin started his medical career in 1981 in Tacoma, Washington, where he managed a 72,000-patient visit ambulatory care service as chief of the Acute Illness Clinic at the Madigan Army Medical Center. A few years later, he moved to Washington, D.C., where he served as chief of emergency medicine at the Walter Reed Army Medical Center. After leaving the Army, he chaired the Department of Community Health and Ambulatory Care at the District of Columbia General Hospital. He was promoted to Acting Commissioner for Public Health for the District of Columbia and later directed one of the busiest ambulance services in the nation as interim director of the Emergency Ambulatory Bureau of the District of Columbia Fire Department. Prior to joining APHA, he was the chief executive of the state of Maryland's Department of Health and Mental Hygiene, a cabinet-level agency.

At APHA, Benjamin also serves as the publisher of the non-profit's monthly publication, *The Nation's Health*, the association's official newspaper, and *The American Journal of Public Health*, the profession's premier scientific publication. He is the author of over 80 scientific articles and book chapters.

Benjamin is a member of several committees, including the U.S. Centers for Disease Control and Prevention director's advisory committee. He also serves on the boards of Research! America, Partnership for Prevention and Advocates for Highway and Auto Safety. He is a member of the Institute of Medicine of the National Academies of Science.



**Amy Kyle, PhD, MPH**, Environmental Health Sciences Division, School of Public Health, University of California, Berkeley

Amy D. Kyle has research and teaching appointments at the School of Public Health at the University of California, Berkeley. She is a co-investigator at the Center for Excellence in Environmental Public Health Tracking, leader of the research translation core for the Superfund Basic Research Program, and co-investigator with colleagues at the US Environmental Protection Agency on America's Children and the Environment. Her research focuses on translation of scientific results for policy and stakeholder audiences, methods to link science and policy, and children's environmental health. Early in her career, she spent 13 years in public service in environmental protection, natural resources management, and public health and retains a keen interest in improving public health practice. She received her MPH and her PhD in environmental health sciences and policy from the University of California at Berkeley and her BA from Harvard College.

Her current professional activities include: Elected Councilor. Environment Section. American Public Health Association. 2005–2007; National Academy of Sciences. Committee on Emerging Issues and Data on Environmental Contaminants. 2004–2006; and, Co-chair. California Breast Cancer Research Program Council. 2006–2007.

## Agenda

### Tuesday, September 19, 2006

#### TUESDAY AFTERNOON SESSION:

12:00 PM–1:00 PM	<b>Registration</b>
1:00–1:15 PM	<b>Welcome Remarks:</b> <i>Alicia Aalto, EPA Region 8 Children's Environmental Health Coordinator</i>
1:15–2:15 PM	<b>Keynote Address:</b> The Need to Examine the Effects of Environmental Influences on the Health and Development of Children ( <i>Speaker: Edward B. Clark, M.D., Wilma T. Gibson Presidential Professor, Chairman of Pediatrics, University of Utah, and, Medical Director, Primary Children Medical Center</i> )
2:15–2:30 PM	<b>Break</b>
2:30–5:00 PM	<b>Recent Developments in Children's Environmental Health Panel Presentation: The Effects of Indoor and Outdoor Air Pollution on Fetal Growth and Early Child Development</b> ( <i>Speaker: Virginia Rauh, ScD, Columbia University's Mailman School of Public Health</i> )
3:10–3:50 PM	<b>Presentation: Health Outcomes and Measures of the Environment Study: Neurobehavioral Effects of Prevalent Toxicants in Children</b> ( <i>Speaker: Bruce P. Lanphear, MD, MPH, Director, Cincinnati Children's Environmental Health Center</i> )
3:50–4:30 PM	<b>Presentation: Effects of Pesticide Exposure on Learning and Development</b> ( <i>Speakers: Patricia Moulton, Ph.D. and Thomas Petros, Ph.D., University of North Dakota</i> )
4:30–5:00 PM	<b>Panel Qs &amp; As</b>
5:00 PM	<b>Adjourn</b>

### Wednesday, September 20, 2006

#### WEDNESDAY MORNING SESSION:

7:30–8:00 AM	<b>Registration &amp; Networking Continental Breakfast</b>
8:00–8:30 AM	<b>Opening Remarks</b> <ul style="list-style-type: none"> <li>• <i>Alicia Aalto, EPA Region 8 Children's Environmental Health Coordinator</i></li> <li>• <i>Lisa Miller, MD, MSPH, CDPHE Division Director</i></li> <li>• <i>Mark Anderson, MD, RMR PEHSU Director</i></li> <li>• <i>Gregory M. Bogdan, PhD, President, CPHA</i></li> <li>• <i>Therese Pilonetti-Hall, REHS, CFSP, President, CEHA</i></li> </ul>
8:30–9:30 AM	<b>Keynote Address: Designing Healthy Communities, Raising Healthier Kids</b> ( <i>Speaker: Georges C. Benjamin, MD, FACP, Executive Director, American Public Health Association</i> )
9:30–9:45 AM	<b>Break</b>
9:45 AM–12:30 PM	<b>Healthy Communities for Children Panel</b>
9:45–10:25 AM	<b>Presentation: The Relationship Between Housing and Children's Health</b> ( <i>Speaker: Rebecca Morley, Executive Director, National Center for Healthy Housing</i> )
10:25–11:05 AM	<b>Presentation: Creating Sustainable Healthy Housing Opportunities for Underserved Children</b> ( <i>Speaker: Wendy Hawthorne, Northeast Denver Housing</i> )
11:05–11:45 AM	<b>Presentation: Environmental Justice Challenges for Children's Environmental Health Decision Making</b> ( <i>Speaker: Charles Lee, Associate Director for Policy and Interagency Liaison Office of Environmental Justice, EPA</i> )
11:45 AM–12:15 PM	<b>Presentation: Integrating Environmental Health into Health Care Practice</b> ( <i>Speaker: Mark Anderson, MD, Director, Rocky Mountain Region Pediatric Environmental Health Specialty Unit</i> )
12:15–12:30 PM	<b>Panel Qs &amp; As</b>

### WEDNESDAY AFTERNOON SESSION:

12:30 PM–1:00 PM	<b>Networking Lunch</b>
1:00–2:00 PM	<b>Poster Display Presentations</b> ( <i>Posters will be displayed starting at the opening of the Summit. The author of the poster will be available next to the display to answer any questions during this time.</i> )
2:00–3:45 PM	<b>Healthy School Environments Panel</b>
2:00–2:30 PM	<b>Presentation: Healthy School Environments Assessment Tool</b> ( <i>Speaker: Bob Axelrad, Senior Policy Advisor, Indoor Environments Division, US Environmental Protection Agency</i> )
2:30–3:00 PM	<b>Presentation: Colorado Connections for Healthy Schools</b> ( <i>Speaker: Cathy White, RN, MSN School Age and Youth Child Health Nurse Consultant, Coordinated School Health Programs, CDPHE</i> )
3:00–3:30 PM	<b>Presentation: Protecting Children from Ultraviolet Radiation</b> ( <i>Speaker: Robert Dellavalle, MD, PhD, MSPH, Associate Professor of Dermatology, Chief of Dermatology Service, Denver, VA Medical Center</i> )
3:30–3:45 PM	<b>Panel Qs &amp; As</b>
3:45–4:00 PM	<b>Break</b>
4:00–5:00 PM	<b>Understanding Environmental Factors and Immune System Susceptibilities in Autism Risk</b> ( <i>Speaker: Isaac Pessah, Ph.D., Director of the Center for Children's Environmental Health and Disease Prevention at the University of California at Davis</i> )
5:00–6:00 PM	<b>Presentation: Protecting Children's Health: Hurricanes, Floods and other Disasters</b> ( <i>Speaker: Gregory M. Bogdan, PhD, Research Director &amp; Medical Toxicology Coordinator, Rocky Mountain Poison and Drug Center</i> )
6:00 PM	<b>Adjourn</b>

### Thursday, September 21, 2006

### THURSDAY MORNING SESSION:

7:30–8:30 AM	<b>Networking Continental Breakfast</b>
8:30–9:30 AM	<b>Keynote Address: What Can We Do to Protect Children from Environmental Contaminants?</b> ( <i>Speaker: Amy Kyle, PhD, MPH, Environmental Health Sciences Division, School of Public Health, UC Berkeley</i> )
9:30–9:45 AM	<b>Break</b>
9:45 AM–12:00 PM	<b>Taking Action to Protect Children from Environmental Contaminants Panel</b>
9:45–10:15 AM	<b>Presentation: Successful Partnerships for Hazardous School Laboratory Chemical Cleanups</b> ( <i>Speaker: Matthew Langenfeld, PBT Coordinator, US EPA, Region 8</i> )
10:15–10:45 AM	<b>Presentation: Protecting Children from Drinking Water Contaminants</b> ( <i>Speaker: Benjamin Gitterman, MD, Co-Director, Mid-Atlantic Center for Children's Health and the Environment</i> )
10:45–11:00 AM	<b>Break</b>
11:00–11:30 AM	<b>Presentation: Protecting Children's Health at Summer Camps</b> ( <i>Speaker: Therese Pilonetti, REHS, CFSP, Program Manager, Consumer Protection Division, CDPHE</i> )
11:30 AM–12:00 PM	<b>Presentation: Can We Protect Children from Endocrine Disruptors?</b> ( <i>Speaker: Suzanne Wuerthele, PhD, Regional Toxicologist, US EPA, Region 8</i> )
12:00–12:20 PM	<b>Questions, Answers and Discussion</b>
12:20 PM–12:30 PM	<b>Closing Remarks: Alicia Aalto, EPA Region 8 Children's Environmental Health Coordinator</b>
12:30 PM	<b>Adjourn</b>

### Summit Speakers:

#### Mark Anderson, MD

Director, Rocky Mountain Region Pediatric Environmental Health Specialty Unit

#### Bob Axelrad

Associate Director, Indoor Environments Division, US Environmental Protection Agency

#### Gregory M. Bogdan, PhD

Research Director & Medical Toxicology Coordinator, Rocky Mountain Poison & Drug Center

#### Robert Dellavalle, MD, PhD, MSPH

Associate Professor of Dermatology, Department of Dermatology, University of Colorado Health Sciences Center

#### Benjamin Gitterman, MD

Co-Director, Mid-Atlantic Center for Children's Health and the Environment

#### Wendy Hawthorne

Program Manager, Healthy Homes Initiative, Northeast Denver Housing Center

#### Matthew M. Langenfeld, MS, QEP

Chemical Initiative Coordinator, US Environmental Protection Agency, Region 8

#### Bruce P. Lanphear, MD, MPH

Associate Professor of Pediatrics, General and Community Pediatrics, Cincinnati Children's Hospital Medical Center

#### Charles Lee

Associate Director, Office of Environmental Justice, US Environmental Protection Agency

#### Rebecca L. Morley

Executive Director, National Center for Healthy Housing

#### Patricia Moulton, PhD

Assistant Professor, Center for Rural Health, School of Medicine and Health Sciences, University of North Dakota

#### Isaac N. Pessah, PhD

Director of the Center for Children's Environmental Health and Disease Prevention, University of California at Davis

#### Therese Pilonetti, REHS, CFSP

Program Manager, Consumer Protection Division, Colorado Department of Public Health and Environment

#### Virginia Rauh, ScD

Columbia University's Mailman School of Public Health

#### Catherine A. White, RN, MSN

School Age and Youth Child Health Nurse Consultant, Coordinated School Health Programs, Colorado Department of Public Health and Environment

#### Suzanne Wuerthele, PhD

Regional Toxicologist, US Environmental Protection Agency, Region 8

